E-Government Competencies: Looking Beyond Technology

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Agenda

1. What are Competencies
2. Empirical findings
3. Case Example
4. Conclusions
Questions

- What are competencies and why are they relevant?
- Which competencies are relevant for civil servants in the context of eGovernment?
- What kind of competencies necessary for which groups and roles?
What are Competencies?
Qualifications vs. Competencies

- Qualifications: Formal degrees, certifications, etc.
- Competencies: What a person can really do in a working context
- Information: „knowing“ something – but not necessarily being able to apply it.

Qualifications are input oriented – competencies are output oriented
### Competencies: Terminology

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Example</th>
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<tbody>
<tr>
<td>Competence (pl: Competences)</td>
<td>A standard of performance, usually specifically defined.</td>
<td>Competence as a project manager</td>
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<tr>
<td>Competency (pl: competencies)</td>
<td>The skills, abilities and knowledge required of a person to carry out a task or set of tasks to a degree of competence</td>
<td>Technical competencies</td>
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<tr>
<td>Skill</td>
<td>Proficiency in successfully carrying out a specific skilled task.</td>
<td>Skill in programming in C++</td>
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<tr>
<td>Ability</td>
<td>The ability to do something, which may be skilled or unskilled, learned or intrinsic.</td>
<td>The ability to think in abstract ways.</td>
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<tr>
<td>Knowledge</td>
<td>An understanding of a subject on an intellectual level.</td>
<td>Knowledge of the history of computing.</td>
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**Competency Types:** technical, social, methodological, personal
**eGovernment Literature**

- Only a few scientific articles about competency requirements for eGovernment
- Methodological competencies: e.g. cost effectiveness, project management and process management
- High level of importance: social competencies
- Subject-matter competencies are typically divided into

<table>
<thead>
<tr>
<th>Technical competencies</th>
<th>Mixed competencies</th>
<th>Non-technical competencies</th>
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<tbody>
<tr>
<td>Electronic workflow systems, electronic procurement systems or knowledge of IT architectures</td>
<td>Process management, knowledge of business administration, cost-effectiveness of eGovernment, customer and quality management, knowledge of operating models, knowledge of contracting</td>
<td>Interdisciplinary knowledge and competencies, e.g. competencies related to implementation, understanding of the IT design and organizations, analysis of IT systems, ability to apply technical solutions to organizational problems</td>
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Empirical Findings: Survey on e-Government Competencies
Competencies Survey

- 40 semi-standardized interviews each lasting approx. 90 minutes
  - 28 Interviews in the German state public administration
  - 12 experts from the scientific and consulting communities (with at least five years of experience)

- Questions were related to existing eGovernment-skills and to future skill requirements
# Existing e-government skills

<table>
<thead>
<tr>
<th>Experts</th>
<th>Department heads</th>
<th>E-government Ombudsmen</th>
<th>Project Leaders</th>
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</table>
| - Current qualification state good or very good  
- Media competencies and technical qualifications largely available  
- Some deficits: e.g. process knowledge, strategic competencies, new organizational models | - No or no significant deficits of their own  
- Barely penetration of and awareness for e-government issues in other departments  
- No will to deal with e-government  
- Some deficits: e.g. strategy development, overarching interrelationships, process thinking | - Knowledge not or barely sufficient  
- Good subject-matter competence  
- Too little knowledge at the management level  
- Some deficits: e.g. awareness of overarching interrelationships, project management, holistic understanding | - Current level of qualifications good or very good  
- Very high technical competence  
- Less support from the political and administrative level  
- Some deficits: e.g. competencies regarding organizational change, project management |
## Future e-government skills

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</thead>
<tbody>
<tr>
<td>Large to very large relevance of e-government in future</td>
<td>Majority: higher relevance in the future</td>
<td>Increasing relevance of e-government</td>
<td>Increasing relevance of e-government, further education, and leadership training</td>
</tr>
<tr>
<td>Special challenge for top level</td>
<td>Fundamental cultural change</td>
<td>Special needs: process changes, digitalization, holistic understanding of tasks, responsibilities and departments, project management, strategy development, business process optimization</td>
<td>Special needs: e.g. project implementation, understanding holistic and integrated system connections, methodological knowledge, business process thinking</td>
</tr>
<tr>
<td>Interdisciplinary approach necessary</td>
<td>Special needs: management and steering qualifications, understanding technological trends, the integrative IT approaches and potentials</td>
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<tr>
<td>Special needs: strategic management competencies, developed sense of networked thinking</td>
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</tbody>
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Survey Reflection

- Considerable skill deficits in certain areas
- The working level’s qualifications and multimedia competencies generally rated as good
- But: general deficits in the areas of strategy, organizational change and process
- (IT) Competencies of the leadership level decisive
- Attitude and awareness changes and new networked thinking necessary as well as social and communicative competencies
Case Example
311 in Miami

- Simple, free access
- Mon - Fri. 7am – 8pm, Sat 8am – 5pm
- Offers services and information from 75+ departments
- Languages English, Spanish, Creole
- Project Initiated 2002, Entered Service 2004
Hurricane Wilma: Storm Damage in Miami
311 Organization

- Calls 311
  - All questions
  - Difficult questions
  - Special questions

Citizen

Call Center

1. Level

2. Level

Dept A 3. Level

Dept B 3. Level

Dept C 3. Level

Knowledge Base

CRM Database

75+ Departments, Agencies, Offices, etc
## Competency Framework

<table>
<thead>
<tr>
<th>Competency Types</th>
<th>Roles</th>
<th>Project Leader</th>
<th>Working Level</th>
<th>Executives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical</td>
<td>Detailed design knowledge (legal, technical, organizational technological)</td>
<td>Critically questioning their own technical working processes</td>
<td>Knowledge of processes and IT knowledge</td>
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</tr>
<tr>
<td>Social</td>
<td>Good negotiation skills, persistence</td>
<td>Participation competency, teamwork ability, self-organization ability</td>
<td>“Tolerance” for reduction in hierarchy cooperative leadership, persuasive power</td>
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<tr>
<td>Personal</td>
<td>Thinking in terms of networks, stress resistance</td>
<td>More ability for self-reflection</td>
<td>Increasing abstraction ability</td>
<td></td>
</tr>
<tr>
<td>Methodological</td>
<td>Implementation-competencies and design competencies</td>
<td>Methods for the content-based redesign of their work</td>
<td>Design methods</td>
<td></td>
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</table>
Conclusion

- Leadership and human resource management are key – build up competencies in your organization
- A kind of emotionalization and deeper understanding for e-government is required
- E-government needs to be broadly incorporated into all activities of public administrations
Next Steps

- Verifying this qualification map in other countries
- Incorporating this map in training and educational programs
- Making competencies part of national strategies